FIG.1

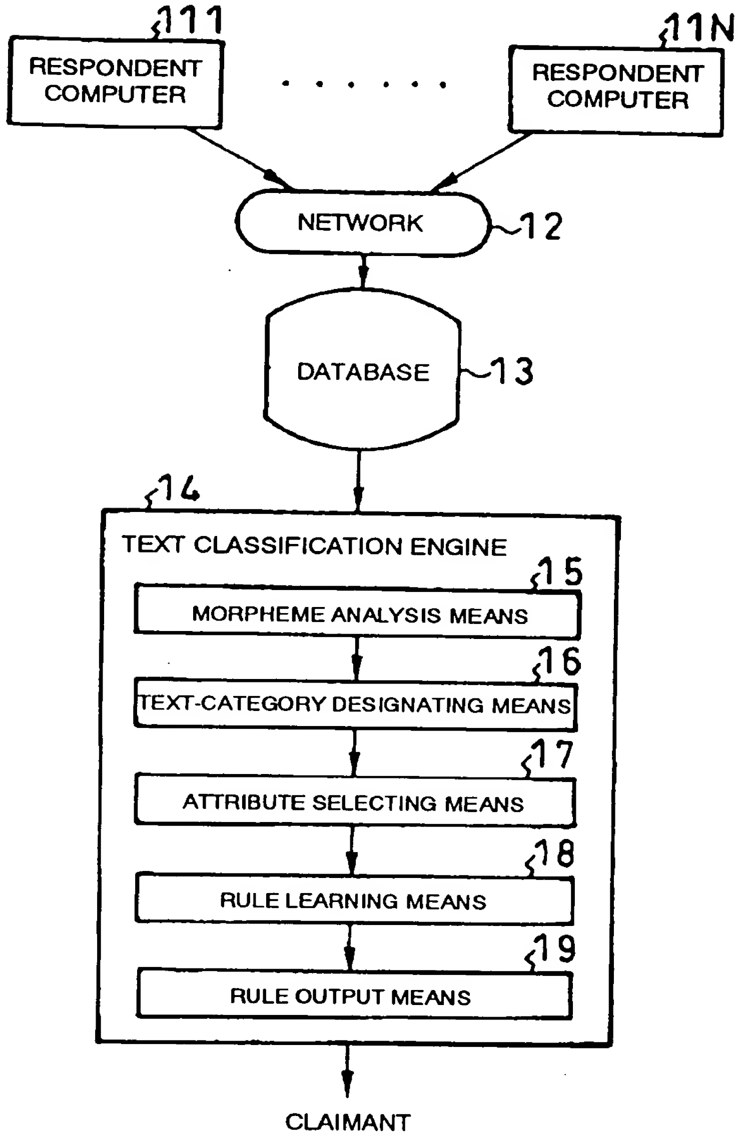

FIG.2

INQUIRY RESPONDENT	WHICH DO YOU ASSUME AS HIGH-TECH ENTERPRISE?	WHAT'S HIGH-TECH FOR YOU?	WHAT DO YOU ASSUME AS HIGH-TECH PRODUCT?	....
1	COMPANY A	ADVANCED AND FUTURISTIC MACHINE	ROBOT	.....
2	COMPANY C	EASY AND FRIENDLY MACHINE	CELL PHONE	.....
3	COMPANY A	HIGH SPEED AND HIGH PERFORMANCE MACHINE	PERSONAL COMPUTER	.....
.....	.....	.....	.....	.....

FIG.3

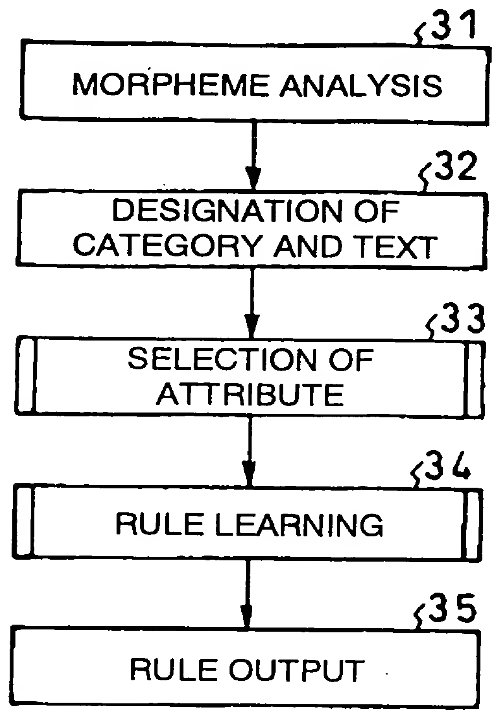
31
MORPHEME ANALYSIS
32
DESIGNATION OF CATEGORY AND TEXT
33
SELECTION OF ATTRIBUTE
34
RULE LEARNING
35
RULE OUTPUT

FIG.4

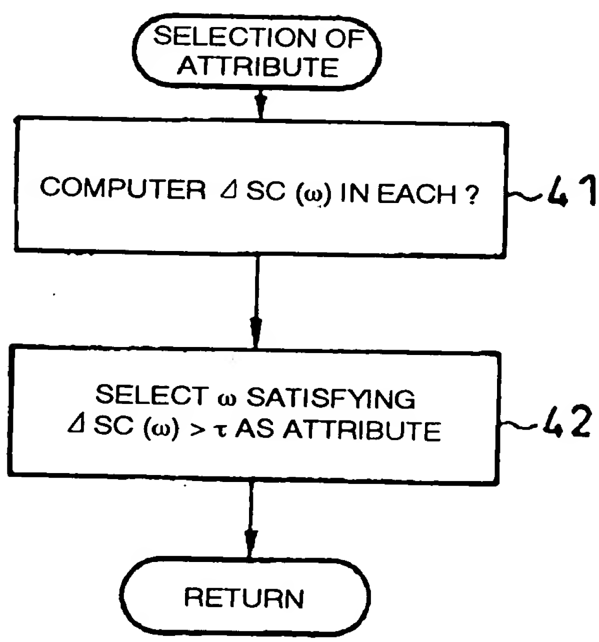
SELECTION OF ATTRIBUTE
COMPUTER Δ SC (ω) IN EACH ?
41
SELECT ω SATISFYING Δ SC (ω) > τ AS ATTRIBUTE
42
RETURN

FIG.5

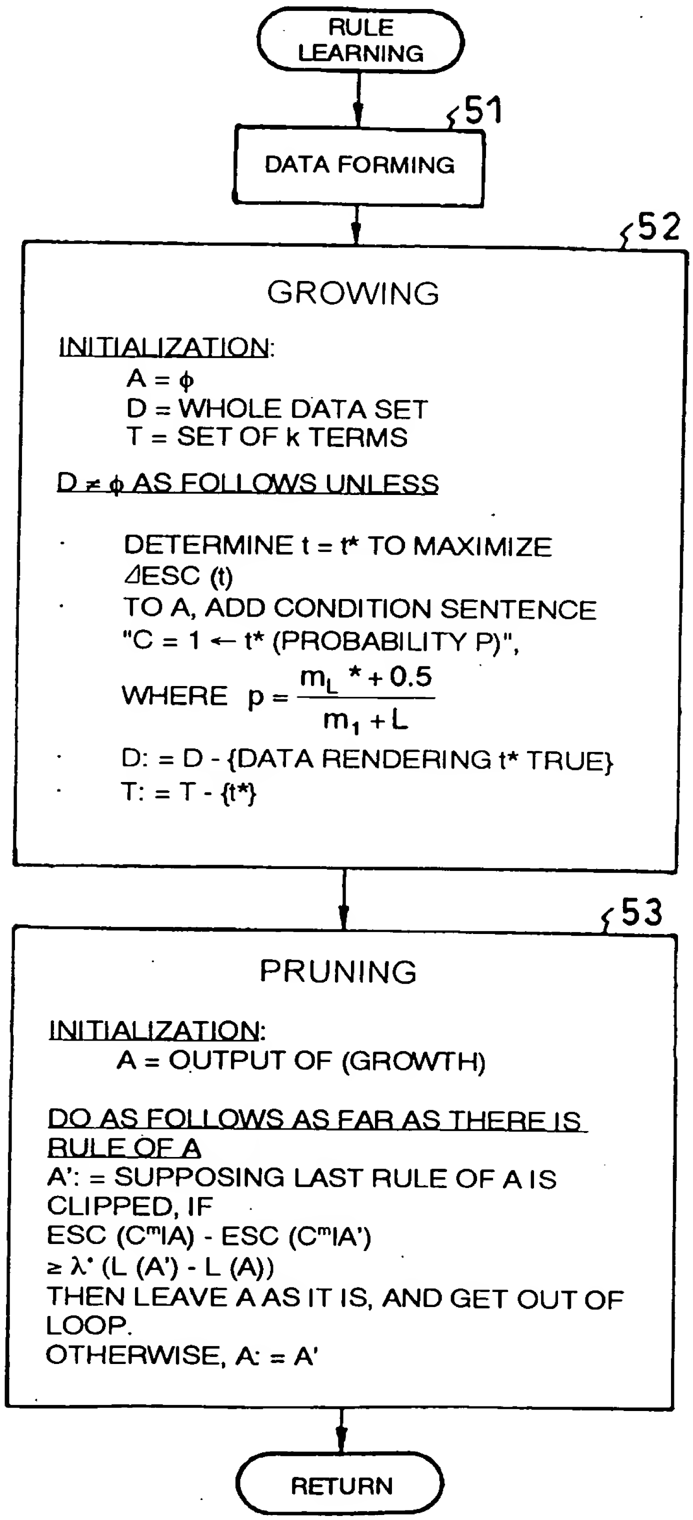
RULE LEARNING
51
DATA FORMING
52
GROWING
INITIALIZATION:
A = ϕ
D = WHOLE DATA SET
T = SET OF k TERMS
D ≠ ϕ AS FOLLOWS UNLESS
· DETERMINE t = t* TO MAXIMIZE ΔESC (t)
· TO A, ADD CONDITION SENTENCE "C = 1 ← t* (PROBABILITY P)",
WHERE $p = \frac{m_L * + 0.5}{m_1 + L}$
· D: = D - {DATA RENDERING t* TRUE}
· T: = T - {t*}
53
PRUNING
INITIALIZATION:
A = OUTPUT OF (GROWTH)
DO AS FOLLOWS AS FAR AS THERE IS RULE OF A
A': = SUPPOSING LAST RULE OF A IS CLIPPED, IF
ESC (C^mIA) - ESC (C^mIA')
≥ λ' (L (A') - L (A))
THEN LEAVE A AS IT IS, AND GET OUT OF LOOP.
OTHERWISE, A: = A'
RETURN

FIG.6

COMPANY A	←	EASY TO USE	[92.0%]
COMPANY A	←	FUTURE & PRIVATE	[87.2%]
COMPANY A	←	FATIGUE & RELIEF	[78.0%]
COMPANY A	←	EASY	[65.8%]
COMPANY A	←	PLEASANT	[56.2%]
OTHER THAN COMPANY A	←	OR ELSE	[79.4%]

FIG.7

COMPANY B	←	QUICK	[82.0%]
COMPANY B	←	MACHINE & EFFICIENCY	[77.8%]
COMPANY B	←	MACHINE & MANIPULATION	[76.0%]
COMPANY B	←	CLEVER	[60.8%]
COMPANY B	←	EXCELLENT	[60.2%]
OTHER THAN COMPANY B	←	OR ELSE	[76.4%]

FIG.8

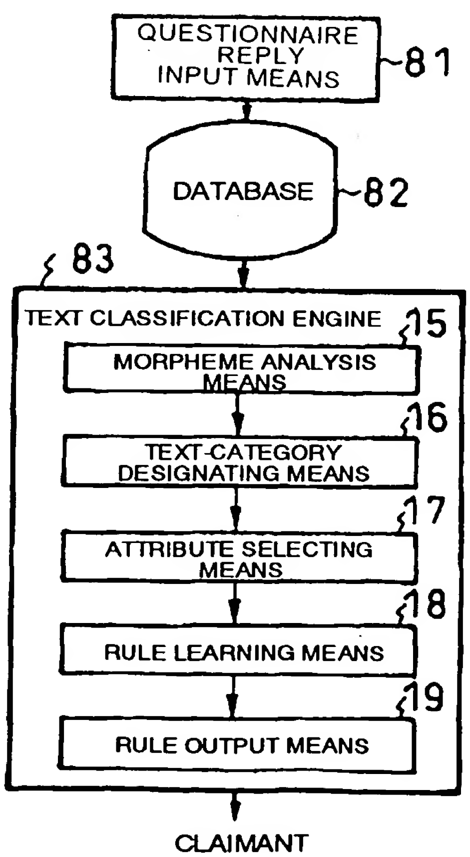

FIG.9

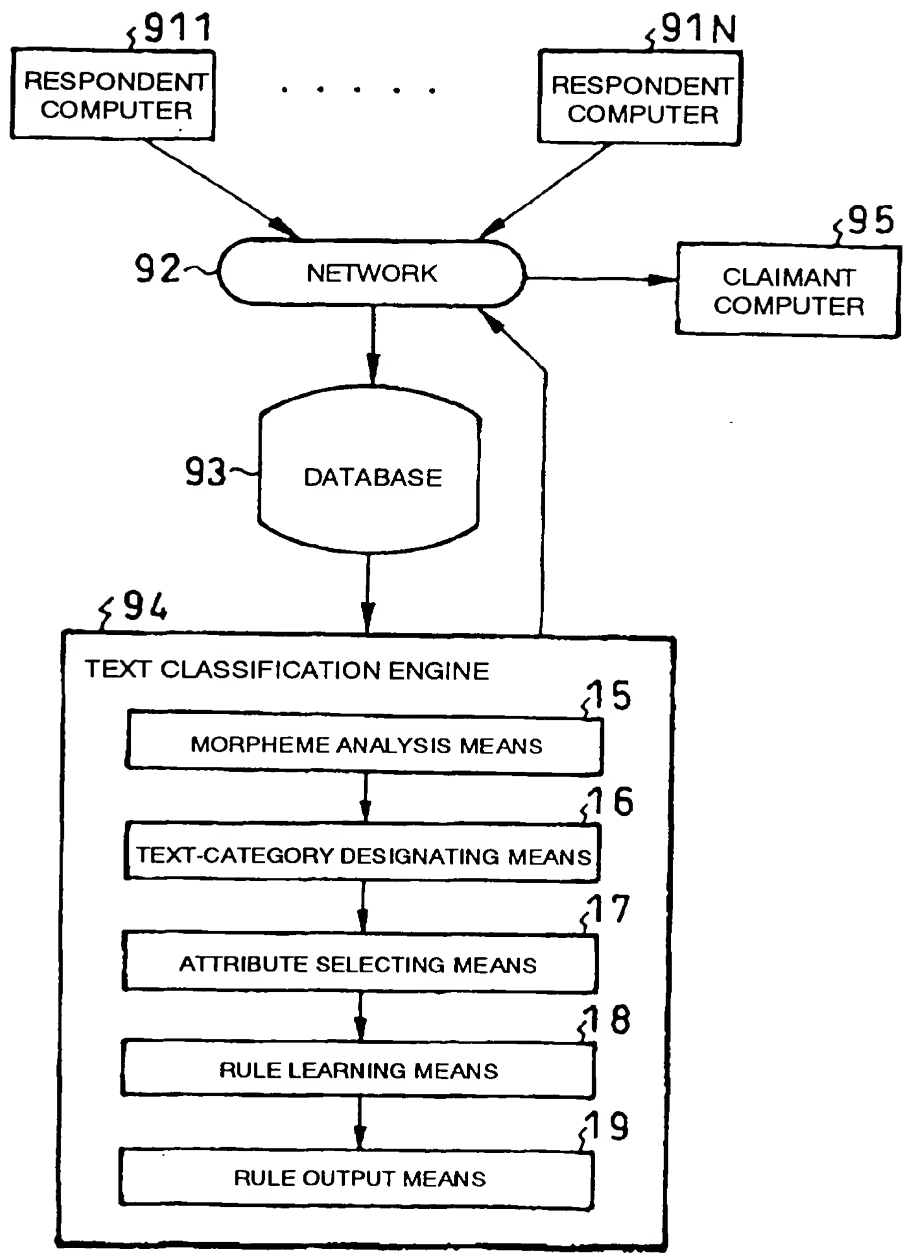
911
RESPONDENT COMPUTER
91N
RESPONDENT COMPUTER
92
NETWORK
95
CLAIMANT COMPUTER
93
DATABASE
94
TEXT CLASSIFICATION ENGINE
15
MORPHEME ANALYSIS MEANS
16
TEXT-CATEGORY DESIGNATING MEANS
17
ATTRIBUTE SELECTING MEANS
18
RULE LEARNING MEANS
19
RULE OUTPUT MEANS

FIG.10

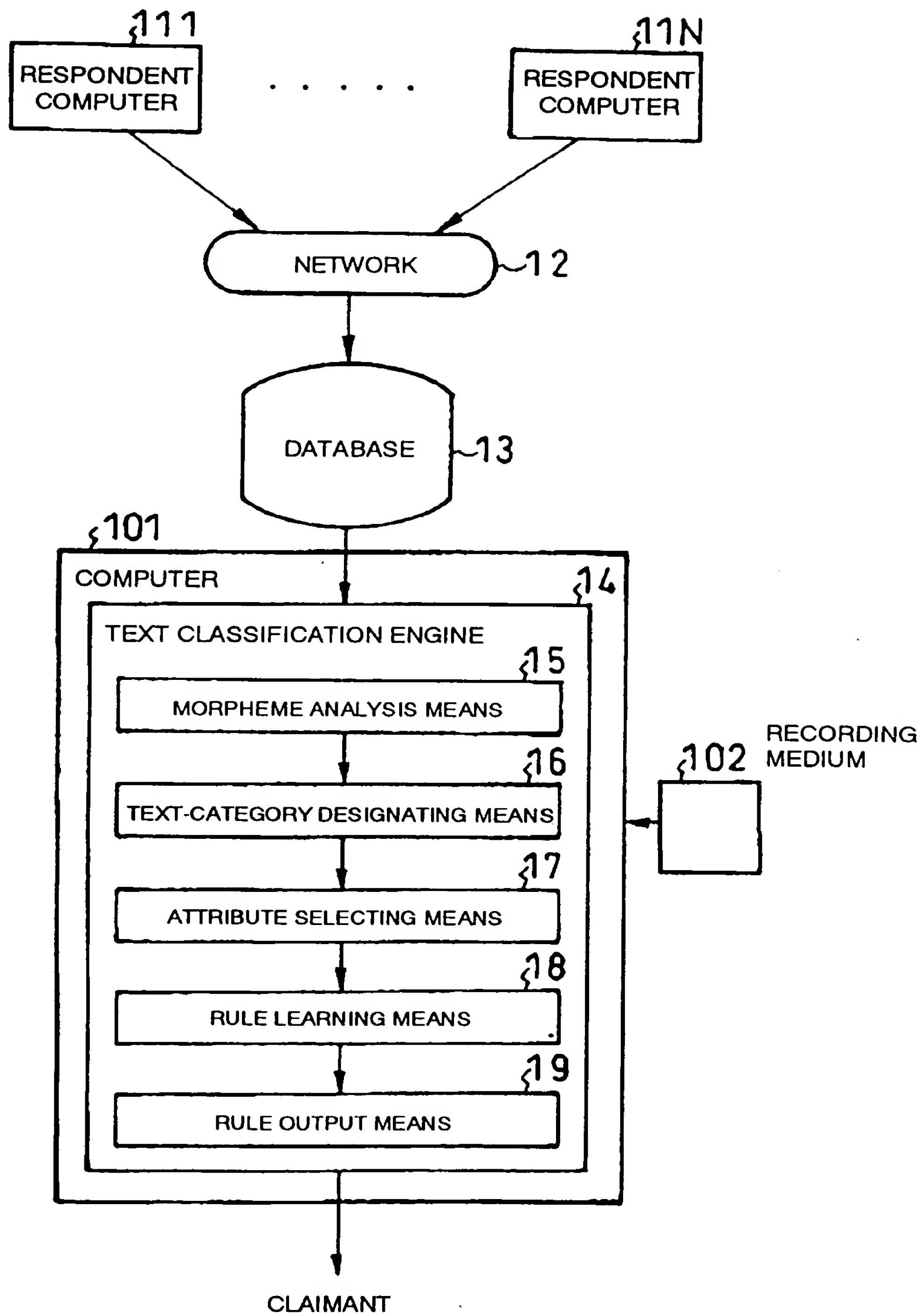
111
RESPONDENT COMPUTER
. . . . .
11N
RESPONDENT COMPUTER
NETWORK
12
DATABASE
13
101
COMPUTER
14
TEXT CLASSIFICATION ENGINE
15
MORPHEME ANALYSIS MEANS
16
TEXT-CATEGORY DESIGNATING MEANS
17
ATTRIBUTE SELECTING MEANS
18
RULE LEARNING MEANS
19
RULE OUTPUT MEANS
102
RECORDING MEDIUM
CLAIMANT

FIG.11

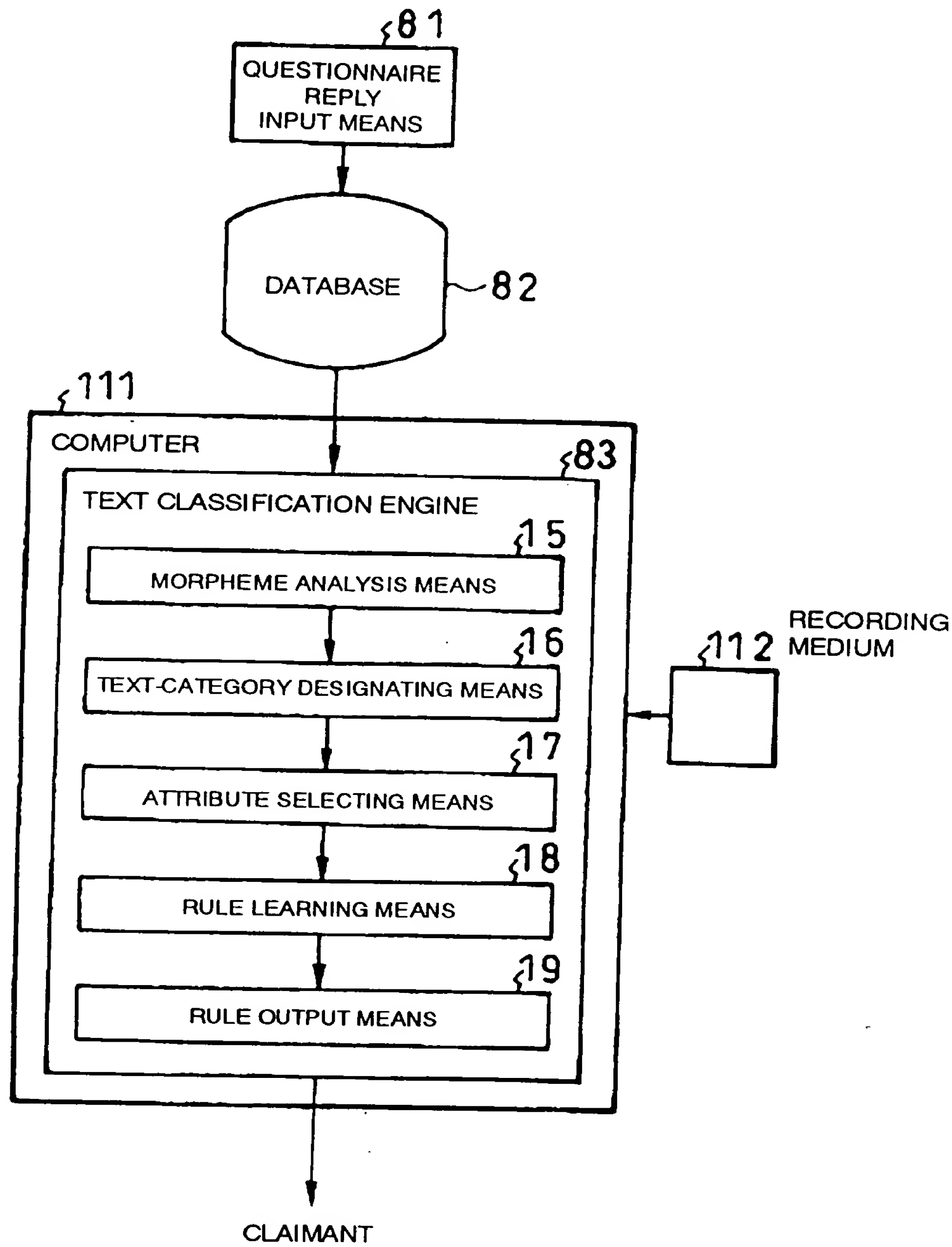
81
QUESTIONNAIRE REPLY INPUT MEANS
DATABASE
82
111
COMPUTER
83
TEXT CLASSIFICATION ENGINE
15
MORPHEME ANALYSIS MEANS
16
TEXT-CATEGORY DESIGNATING MEANS
17
ATTRIBUTE SELECTING MEANS
18
RULE LEARNING MEANS
19
RULE OUTPUT MEANS
112
RECORDING MEDIUM
CLAIMANT

FIG.12

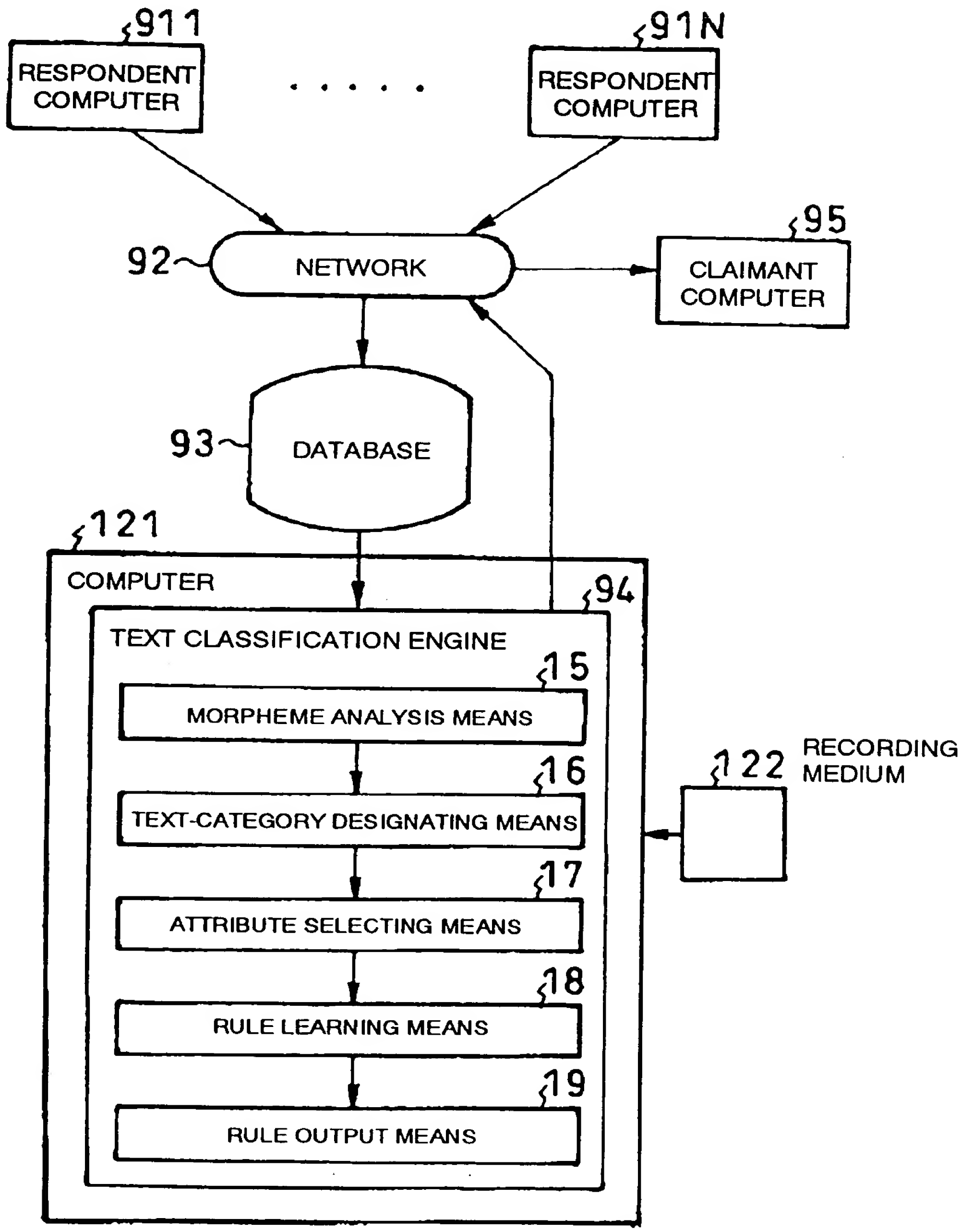
911
RESPONDENT COMPUTER
91N
RESPONDENT COMPUTER
92
NETWORK
95
CLAIMANT COMPUTER
93
DATABASE
121
COMPUTER
94
TEXT CLASSIFICATION ENGINE
15
MORPHEME ANALYSIS MEANS
16
TEXT-CATEGORY DESIGNATING MEANS
17
ATTRIBUTE SELECTING MEANS
18
RULE LEARNING MEANS
19
RULE OUTPUT MEANS
122
RECORDING MEDIUM

FIG. 13A

$$SC(c^{m}) = mH\left(\frac{m^{+}}{m}\right) + \frac{1}{2}\log\frac{m}{2\pi} + \log\pi \qquad (1)$$

FIG. 13B

$$H(z) \overset{def}{=} -z\log z - (1-z)\log(1-z) \qquad (2)$$

FIG. 13C

$$SC(c^{m_\omega}) = m_\omega H\left(\frac{m_\omega{}^{+}}{m_\omega}\right) + \frac{1}{2}\log\frac{m_\omega}{2\pi} + \log\pi \qquad (3)$$

FIG. 13D

$$SC(c^{m_{\neg\omega}}) = m_{\neg\omega} H\left(\frac{m_{\neg\omega}{}^{+}}{m_{\neg\omega}}\right) + \frac{1}{2}\log\frac{m_{\neg\omega}}{2\pi} + \log\pi \qquad (4)$$

FIG. 13E

$$\begin{aligned}\Delta SC(\omega) &= \frac{1}{m}\Big(SC(c^{m}) - (SC(c^{m_\omega}) + SC(c^{m_{\neg\omega}}))\Big)\\ &= \left[H\left(\frac{m^{+}}{m}\right) - \frac{m_\omega}{m}H\left(\frac{m_\omega{}^{+}}{m_\omega}\right) - \frac{m_{\neg\omega}}{m}H\left(\frac{m_{\neg\omega}{}^{+}}{m_{\neg\omega}}\right)\right]\\ &\quad -\left[\frac{1}{2m}\log\frac{m_\omega m_{\neg\omega}\pi}{2m}\right]\end{aligned} \qquad (5)$$

FIG. 13F

$$ESC\,(c^{m}) = Loss\,(c^{m}) + \lambda\sqrt{m\log m} \tag{6}$$

FIG. 13G

$$ESC\,(c^{m_t}) = Loss\,(c^{m_t}) + \lambda\sqrt{m_t\log m_t} \tag{7}$$

FIG. 13H

$$ESC\,(c^{m_{\neg t}}) = Loss\,(c^{m_{\neg t}}) + \lambda\sqrt{m_{\neg t}\log m_{\neg t}} \tag{8}$$

FIG. 13 I

$$\begin{aligned}\Delta ESC\,(t) &= ESC\,(c^{m}) - (ESC\,(c^{m_t}) + ESC\,(c^{m_{\neg t}}))\\ &= \left[Loss\,(c^{m}) - Loos\,(c^{m_t}) - Loos\,(c^{m_{\neg t}})\right]\\ &\quad + \left[\lambda(\sqrt{m\log m} - \sqrt{m_t\log m_t} - \sqrt{m_{\neg t}\log m_{\neg t}})\right]\end{aligned} \tag{9}$$

FIG. 13J

$$(m_{t\cdot}^{+} + 0.5)/(m_{t\cdot} + 1) \tag{10}$$

FIG. 13K

$$ESC\,(c^{m}|A) = \sum_{t} ESC\,(c^{m_t}) \tag{11}$$

FIG. 13L

$$\begin{aligned}ESC\,(c^{m} : A) &= ESC\,(c^{m}|A) + \lambda' L(A)\\ &= \sum_{t} Loss\,(c^{m_t}) + \lambda\sum_{t}\sqrt{m_t\log m_t} + \lambda' L(A)\end{aligned} \tag{12}$$